



SEQUENCE LISTING

<110> Reubi, Jean-Claude

<120> Use of Labelled CCK-B Receptor Ligands for the
Detection and Localization of Malignant Human Tumours

<130> 1668-303

<140> 09/125,823

<141> 1999-01-19

<150> EPO 96200498.2

<151> 1996-02-27

<150> PCT/US97/03056

<151> 1997-02-25

<160> 27

<170> PatentIn Ver. 2.0

<210> 1

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<221> MOD_RES

<222> (1) .. (7)

<223> The peptide is labelled with a radionuclide or
with a paramagnetic metal isotope.

<220>

<221> MOD_RES

<222> (7)

<223> Xaa is Phe-NH₂.

<220>

<223> Description of Artificial Sequence:Cholecystokin
in analog.

<400> 1

Tyr Met Gly Trp Met Asp Xaa

1

5

<210> 2

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<221> MOD_RES

<222> (1) .. (8)

<223> The peptide is labelled with a radionuclide or
with a paramagnetic metal isotope.

<220>
<221> MOD_RES
<222> (8)
<223> Xaa is Phe-NH₂.

<220>
<223> Description of Artificial Sequence:Cholecystokinin
analog.

<400> 2
Asp Tyr Met Gly Trp Met Asp Xaa
1 5

<210> 3
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> MOD_RES
<222> (1) . . (8)
<223> The peptide is labelled with a radionuclide or
with a paramagnetic metal isotope.

<220>
<221> MOD_RES
<222> (3)
<223> Nle

<220>
<221> MOD_RES
<222> (6)
<223> Nle

<220>
<221> MOD_RES
<222> (8)
<223> Xaa is Phe-NH₂.

<220>
<223> Description of Artificial Sequence:Cholecystokinin
analog.

<400> 3
Asp Tyr Xaa Gly Trp Xaa Asp Xaa
1 5

<210> 4
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> MOD_RES
<222> (1) . . (8)
<223> The peptide is labelled with a radionuclide or
with a paramagnetic metal isotope.
<220>

<221> MOD_RES
<222> (1)
<223> Xaa is DAsp.

<220>
<221> MOD_RES
<222> (3)
<223> Nle

<220>
<221> MOD_RES
<222> (6)
<223> Nle

<220>
<221> MOD_RES
<222> (8)
<223> Xaa is Phe-NH2.

<220>
<223> Description of Artificial Sequence:Cholecystokinin
analog.

<400> 4
Xaa Tyr Xaa Gly Trp Xaa Asp Xaa
1 5

<210> 5
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> MOD_RES
<222> (1) . . (8)
<223> The peptide is labelled with a radionuclide or
with a paramagnetic metal isotope.

<220>
<221> MOD_RES
<222> (1)
<223> Xaa is DAsp.

<220>
<221> MOD_RES
<222> (8)
<223> Xaa is Phe-NH2.

<220>
<223> Description of Artificial Sequence:Cholecystokinin
analog.

<400> 5
Xaa Tyr Met Gly Trp Met Asp Xaa
1 5

<210> 6
<211> 8

<212> PRT
<213> Artificial Sequence

<220>
<221> MOD_RES
<222> (1) .. (8)
<223> The peptide is labelled with a radionuclide or
with a paramagnetic metal isotope.

<220>
<221> MOD_RES
<222> (1)
<223> Dpr

<220>
<221> MOD_RES
<222> (3)
<223> Nle

<220>
<221> MOD_RES
<222> (6)
<223> Nle

<220>
<221> MOD_RES
<222> (8)
<223> Xaa is Phe-NH2.

<220>
<223> Description of Artificial Sequence:Cholecystokinin
analog.

<400> 6
Xaa Tyr Xaa Gly Trp Xaa Asp Xaa
1 5

<210> 7
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> MOD_RES
<222> (1) .. (8)
<223> The peptide is labelled with a radionuclide or
with a paramagnetic metal isotope.

<220>
<221> MOD_RES
<222> (6)
<223> Nle

<220>
<221> MOD_RES
<222> (8)

<223> Xaa is Phe-NH₂.

<220>

<223> Description of Artificial Sequence:Cholecystokinin analog.

<400> 7

Asp Tyr Thr Gly Trp Xaa Asp Xaa
1 5

<210> 8

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<221> MOD_RES

<222> (1) .. (9)

<223> The peptide is labelled with a radionuclide or with a paramagnetic metal isotope.

<220>

<221> MOD_RES

<222> (4)

<223> Nle

<220>

<221> MOD_RES

<222> (7)

<223> Nle

<220>

<221> MOD_RES

<222> (9)

<223> Xaa is Phe-NH₂.

<220>

<223> Description of Artificial Sequence:Cholecystokinin analog.

<400> 8

Arg Asp Tyr Xaa Gly Trp Xaa Asp Xaa
1 5

<210> 9

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<221> MOD_RES

<222> (1) .. (9)

<223> The peptide is labelled with a radionuclide or with a paramagnetic metal isotope.

<220>

<221> MOD_RES

<222> (7)

<223> Nle

<220>
<221> MOD_RES
<222> (9)
<223> Xaa is Phe-NH2.

<220>
<223> Description of Artificial Sequence:Cholecystokinin
analog.

<400> 9
Arg Asp Tyr Thr Gly Trp Xaa Asp Xaa
1 5

<210> 10
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> MOD_RES
<222> (1) . . (10)
<223> The peptide is labelled with a radionuclide or
with a paramagnetic metal isotope.

<220>
<221> MOD_RES
<222> (5)
<223> Nle

<220>
<221> MOD_RES
<222> (8)
<223> Nle

<220>
<221> MOD_RES
<222> (10)
<223> Xaa is Phe-NH2.

<220>
<223> Description of Artificial Sequence:Cholecystokinin
analog.

<400> 10
Tyr Gly Asp Tyr Xaa Gly Trp Xaa Asp Xaa
1 5 10

<210> 11
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> MOD_RES
<222> (1) .. (10)
<223> The peptide is labelled with a radionuclide or
with a paramagnetic metal isotope.

<220>
<221> MOD_RES
<222> (1)
<223> Xaa is DTyr.

<220>
<221> MOD_RES
<222> (5)
<223> Nle

<220>
<221> MOD_RES
<222> (8)
<223> Nle

<220>
<221> MOD_RES
<222> (10)
<223> Xaa is Phe-NH₂.

<220>
<223> Description of Artificial Sequence:Cholecystokinin
analog.

<400> 11
Xaa Gly Asp Tyr Xaa Gly Trp Xaa Asp Xaa
1 5 10

<210> 12
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> MOD_RES
<222> (1)
<223> Xaa is DTyr.

<220>
<221> MOD_RES
<222> (5)
<223> Nle

<220>
<221> MOD_RES
<222> (8)
<223> Nle

<220>
<221> MOD_RES
<222> (10)
<223> Xaa is Phe-NH2.

<220>
<223> Description of Artificial Sequence:Cholecystokin
analog.

<400> 12
Xaa Gly Asp Tyr Xaa Gly Trp Xaa Asp Xaa
1 5 10

<210> 13
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> MOD_RES
<222> (1)
<223> Xaa is 125I iodinated DTyr.

<220>
<221> MOD_RES
<222> (5)
<223> Nle

<220>
<221> MOD_RES
<222> (8)
<223> Nle

<220>
<221> MOD_RES
<222> (10)
<223> Xaa is Phe-NH2.

<220>
<223> Description of Artificial Sequence:Cholecystokin
analog.

<400> 13
Xaa Gly Asp Tyr Xaa Gly Trp Xaa Asp Xaa
1 5 10

<210> 14
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> MOD_RES
<222> (1)
<223> Xaa is DTyr.

<220>
<221> MOD_RES
<222> (4)
<223> Xaa is 125I iodinated Tyr.

<220>
<221> MOD_RES
<222> (5)
<223> Nle

<220>
<221> MOD_RES
<222> (8)
<223> Nle

<220>
<221> MOD_RES
<222> (10)
<223> Xaa is Phe-NH₂.

<220>
<223> Description of Artificial Sequence:Cholecystokinin
analog.

<400> 14
Xaa Gly Asp Xaa Xaa Gly Trp Xaa Asp Xaa
1 5 10

<210> 15
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> MOD_RES
<222> (1)
<223> Xaa is 125I iodinated DTyr.

<220>
<221> MOD_RES
<222> (4)
<223> Xaa is Tyr(SO₃H).

<220>
<221> MOD_RES
<222> (5)
<223> Nle

<220>
<221> MOD_RES
<222> (8)
<223> Nle

<220>
<221> MOD_RES
<222> (10)
<223> Xaa is Phe-NH₂.

<220>
<223> Description of Artificial Sequence:Cholecystokinin analog.

<400> 15
Xaa Gly Asp Xaa Xaa Gly Trp Xaa Asp Xaa
1 5 10

<210> 16
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> MOD_RES
<222> (2)
<223> Xaa is Tyr(SO3H).

<220>
<221> MOD_RES
<222> (8)
<223> Xaa is Phe-NH2.

<220>
<223> Description of Artificial Sequence:Cholecystokinin analog.

<400> 16
Asp Xaa Met Gly Trp Met Asp Xaa
1 5

<210> 17
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> MOD_RES
<222> (8)
<223> Xaa is Phe-NH2.

<220>
<223> Description of Artificial Sequence:Cholecystokinin analog.

<400> 17
Asp Tyr Met Gly Trp Met Asp Xaa
1 5

<210> 18
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> MOD_RES
<222> (1)
<223> Xaa is DTyr.

<220>
<221> MOD_RES
<222> (4)
<223> Xaa is Tyr(SO3H).

<220>
<221> MOD_RES
<222> (5)
<223> Nle

<220>
<221> MOD_RES
<222> (8)
<223> Nle

<220>
<221> MOD_RES
<222> (10)
<223> Xaa is Phe-NH2.

<220>
<223> Description of Artificial Sequence:Cholecystokinin
analog.

<400> 18
Xaa Gly Asp Xaa Xaa Gly Trp Xaa Asp Xaa
1 5 10

<210> 19
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> MOD_RES
<222> (1)
<223> Xaa is DTPA substituted Asp.

<220>
<221> MOD_RES
<222> (8)
<223> Xaa is Phe-NH2.

<220>
<223> Description of Artificial Sequence:Cholecystokinin
analog.

<400> 19
Xaa Tyr Met Gly Trp Met Asp Xaa
1 5

<210> 20
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> MOD_RES
<222> (1)
<223> Xaa is DTPA substituted Asp.

<220>
<221> MOD_RES
<222> (3)
<223> Nle

<220>
<221> MOD_RES
<222> (6)
<223> Nle

<220>
<221> MOD_RES
<222> (8)
<223> Xaa is Phe-NH₂.

<220>
<223> Description of Artificial Sequence:Cholecystokinin
analog.

<400> 20
Xaa Tyr Xaa Gly Trp Xaa Asp Xaa
1 5

<210> 21
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> MOD_RES
<222> (1)
<223> Xaa is DTPA substituted DAsp.

<220>
<221> MOD_RES
<222> (3)
<223> Nle

<220>
<221> MOD_RES
<222> (6)
<223> Nle

<220>
<221> MOD_RES
<222> (8)
<223> Xaa is Phe-NH₂.

<220>
<223> Description of Artificial Sequence:Cholecystokinin
analog.

<400> 21
Xaa Tyr Xaa Gly Trp Xaa Asp Xaa
1 5

<210> 22
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> MOD_RES
<222> (1)
<223> Xaa is DTPA substituted DAsp.

<220>
<221> MOD_RES
<222> (8)
<223> Xaa is Phe-NH₂.

<220>
<223> Description of Artificial Sequence:Cholecystokinin
analog.

<400> 22
Xaa Tyr Met Gly Trp Met Asp Xaa
1 5

<210> 23
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> MOD_RES
<222> (1)
<223> Xaa is beta-DTPA substituted Dpr.

<220>
<221> MOD_RES
<222> (3)
<223> Nle

<220>
<221> MOD_RES
<222> (6)
<223> Nle

<220>
<221> MOD_RES
<222> (8)
<223> Xaa is Phe-NH₂.

<220>
<223> Description of Artificial Sequence:Cholecystokinin
analog.

<400> 23
Xaa Tyr Xaa Gly Trp Xaa Asp Xaa
1 5

<210> 24
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> MOD_RES
<222> (1)
<223> Xaa is DTPA substituted Asp.

<220>
<221> MOD_RES
<222> (6)
<223> Nle

<220>
<221> MOD_RES
<222> (8)
<223> Xaa is Phe-NH₂.

<220>
<223> Description of Artificial Sequence:Cholecystokinin
analog.

<400> 24
Xaa Tyr Thr Gly Trp Xaa Asp Xaa
1 5

<210> 25
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> MOD_RES
<222> (1)
<223> Xaa is ¹¹⁵Indium-DTPA substituted Asp.

<220>
<221> MOD_RES
<222> (3)
<223> Nle

<220>
<221> MOD_RES
<222> (6)
<223> Nle

<220>
<221> MOD_RES
<222> (8)
<223> Xaa is Phe-NH2.

<220>
<223> Description of Artificial Sequence:Cholecystokinin
analog.

<400> 25
Xaa Tyr Xaa Gly Trp Xaa Asp Xaa
1 5

<210> 26
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> MOD_RES
<222> (1)
<223> Xaa is 115Indium-DTPA substituted DAsp.

<220>
<221> MOD_RES
<222> (3)
<223> Nle

<220>
<221> MOD_RES
<222> (6)
<223> Nle

<220>
<221> MOD_RES
<222> (8)
<223> Xaa is Phe-NH2.

<220>
<223> Description of Artificial Sequence:Cholecystokinin
analog.

<400> 26
Xaa Tyr Xaa Gly Trp Xaa Asp Xaa
1 5

<210> 27
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<221> SITE
<222> (1) .. (25)
<223> The first 25 Xaa's may or may not be present; can be equal or different; are selected from Ala, Leu, Asn, Dpr, Gln, Glu, Ser, Ile, Met, His, Asp, Lys, Gly, Thr, Pro, Pyr, Arg, Tyr, Trp, Val and Phe.

<220>
<221> SITE
<222> (26)
<223> Xaa is Asp, Dpr, Glu or Pyr, with the proviso that Xaa can only be Pyr when residues 1-25 are not present.

<220>
<221> SITE
<222> (28)
<223> Xaa is Met, Leu or Nle.

<220>
<221> SITE
<222> (31)
<223> Xaa is Met, Leu or Nle.

<220>
<221> SITE
<222> (33)
<223> Xaa is Phe terminating in a hydroxy group, an acetoxy group or an amino group.

<220>
<223> Description of Artificial Sequence:Cholecystokinin analog.

<400> 27
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Tyr Xaa Gly Trp Xaa Asp
20 25 30

Xaa